thickness, bulges unequally, upon one side, near the base. becomes gradually deeper, until the bud assumes the form of an urn-shaped body, attached by one of its edges (wood-cut 36), with its summit The contents of the buds, as they increase in bulk, become more and more disconnected from the wall, the lip opens, the wall is split laterally, and, with the increasing bulk of the contents of the bud, soon dwindles down to a band, passing like a hoop over the contents of the bud, which, at this period, appear to be a mass of yolk substance in process of segmentation. The wall soon disappears altogether, and the yolk substance remains a sphere, attached to the peduncle of the bud, fitting into a sort of socket formed by the remnant of the outer wall.

This lateral bulging



EUDENDRIUM DISPAR Ag. Female meduene-buds in various stages of development.

The various shapes of the hydra (Pl. XXVII. Figs. 23, 24, and 25), as illustrated here, are characteristic of the habits of all the Eudendrioids. Fig. 26 shows very well the broad disk (dc), upon which the proboscis (p) arises, and also exhibits All Hydroids having taper-pointed tenthe true character of the tentacles (1). tacles are able to contract them into a club-shaped form, as we have represented them in some of the figures on this plate (Figs. 12, 22, 23, 24, and 25), but none of the truly clavate tentacles, such as those of Pennaria (Pl. XV. Fig. 2, t1), of the reproductive hydra of Hydractinia (Pl. XVI. Figs. 2ª, 2f, 3, &c.), of Coryne (Pl. XVII.), and of Halocharis (Pl. XX. Fig. 10), can assume a pointed form.

On Pl. XXVII. this species is represented under the name of Thoa dispar. But I am now satisfied that the name Thoa cannot safely be retained for Eudendrium.

SECTION III.

BOUGAINVILLIA SUPERCILIARIS AG.

Proles hydroidea. — The hydroid of this species has always been found in the purest sea-water, along the rocky shores of our coast. It grows in clusters, not more than two inches high, and is usually attached to some rock, or to the shell of a Mytilus, and seldom to sea-weeds. The hydrarium (Pl. XXVII. Fig. 1), the stem of which is about as thick as a cambric needle, has a deep red tint, and branches rather irregularly, though more or less alternately and spirally, and in like manner do the secondary branches arise from the primary ones. The base of every branch (Fig. 2, a b c d e), as well as every pedicel (Fig. 3, c) of the horny sheath, is